

Description of a new Frog belonging to the Genus *Heleophryne* and a note on the systematic position of the Genus.

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IN the Annals of the South African Magazine, Vol I, p. 110, a solitary tree frog, taken in the neighbourhood of Stellenbosch, C.C., was referred by Mr. W. L. Selater to a new genus of *Ranidae*, and it was said to be related to *Rhacophorus*.

In the Zool. Anz., Bd. 28, p. 785, Dr. Jean Roux includes this genus in a section of *Ranidae*, which have an intercalary bone between the two last phalanges of the digits.

Quite recently the Transvaal Museum has received the second recorded specimen of this genus, and on examination of the osteological characters of the specimen it now appears that the genus is altogether misplaced.

Firstly, the terminal phalanges are T-shaped, and there is no intercalary bone between the two terminal phalanges of the digits. But it came as a distinct surprise to find that this is an Arciferous genus.

The characters of the genus are as follows:—

Shoulder girdle arciferous, upper jaw toothed but lower jaw not so, diapophyses of sacral vertebrae somewhat dilated but not strongly so, vertebrae procoelous, no ribs (the diapophyses of body vertebrae somewhat elongated), sternum a rather large and broad cartilaginous plate entire behind and without bony style, omosternum absent (possibly present as a rudiment), outer metatarsals separated, toes webbed, fingers free, tips of fingers and toes with well-developed disks, terminal phalanges T-shaped, the two arms of the cross-piece of the T forming an obtuse angle of about 160 degrees with each other, tympanum not visible, pupil vertical, vomerine teeth present, tongue disk-shaped, rounded and nearly free behind.

From this combination of characters it is evident that the genus belongs to the *Cystignathidae* and the sub-family *Cystignathinae*.

If the character of the pupil is really of primary importance its relationship is with the Australian rather than the American genera.

This is, so far as I know, the first record of the occurrence of a *Cystignathid* genus in South Africa. It is of interest as being an addition to our list of South African vertebrates with Australian affinities.

Our specimen comes from Knysna, C.C. (J. H. Rex, collector), and it seems to present sufficiently distinct characters to justify my provisionally referring it to a new species with the following characters:—

HELEOPHRYNE REGIS n. sp., distinct from *H. purcelli* Sel. in respect to the webbing of the feet; the feet are entirely webbed in *purcelli*, only about half webbed in *regis*.

Snout rounded, the gape wide, vomerine teeth in two transverse groups between the choanae, interorbital space a trifle narrower than upper eyelid, tympanum indistinct, a slight fold from the eye to the

tympanic region; fingers free, ending in triangular disks, fourth finger longer than the second; toes half webbed, the first toe practically free, terminal disks not so large as those of the fingers; subarticular tubercles well developed, oval, inner metatarsal tubercle elliptic of moderate size, the outer one wanting; tibio-tarsal joint of adpressed hind limb reaches end of snout; skin smooth above, granular on the belly and under the thighs.

Colour, purplish above with irregular dark spots, the limbs with indistinct dark cross bands; ventral surfaces yellowish white.

Measurements, from snout to vent, 42 mm., breadth of gape 17 mm., distance from ankle to tip of fourth toe 19·5 mm.
